MONTANA WHEAT

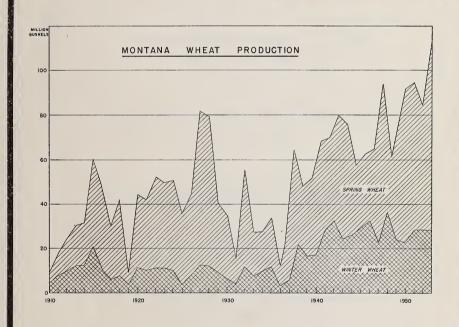
Data Relating

to

Production and Marketina

Of Wheat

1949 to 19



Issued Cooperatively by

Montana Department of Agriculture

and

U. S. Department of Agriculture

Helena, Montana

MONTANA STATE LIBRARY

930 East Lyndale Avenue Helena, Montana 59601

STATE DOCUMENTS





MONTANA WHEAT

Acreage of Wheat Fertilized With Commercial Fertilizer

Wheat Production By Protein Content Groups

1951, 1952 and 1953

Premiums Offered for Protein in Wheat

Av. 1942-51, 1952 and 1953

Acreage of Wheat Sprayed for Weeds

1949, 1950, 1951 and 1952

Farm and Commercial Grain Storage Capacity

1951 and 1953

MONTANA DEPARTMENT OF AGRICULTURE

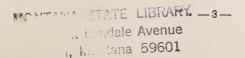
Albert H. Kruse, Commissioner

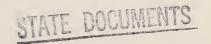
UNITED STATES DEPARTMENT OF AGRICULTURE Agricultural Marketing Service

P. J. Creer, Agricultural Statistician in Charge L. W. Wallin, Agricultural Statistician John R. Price, Agricultural Statistician

> Helena, Montana R.M.A. Project 431-34







PRODUCTION OF MONTANA WHEAT

Wheat growing became prominent in Montana in the 1900's, and since 1913 it has been the State's chief agricultural enterprise. From 1948 to 1952, about 38 cents of the Montana farm income dollar came from wheat as compared with 33½ cents from cattle. Recently Montana has held, among other States, third position in the production of all wheat and second position in the production of spring wheat. Since 1900 the State's contribution to the national wheat crop has, with the exception of the 1930 drought period, increased steadily. From 1900 to 1904 the output averaged 2.6 million bushels and was only .04 percent of the U. S. crop. In 1953 Montana's wheat production was measured for the first time in nine digit figures of more than one hundred million bushels and was nearly ten percent of the Nation's harvest.

Montana has gained prominence in wheat production largely through an expansion of acreage. From 1918 to 1945 wheat seedings ranged from 3 million to 4.7 million acres. Since 1946 large blocks of sod have been broken for wheat and some acreage previously occupied by other crops has been diverted to wheat. In 1953 wheat seedings reached an all-time record of 6.4 million acres. Total acreage devoted to this grain, including summer fallow land, amounted to a little more than 7 million acres in 1945 which took up 60 percent of the total cropland. By 1953 it included 11½ million acres and involved 73 percent of the total cropland.

Increased use of summer fallowed land tor wheat has accompanied the general expansion of acreage. Where 7 of every 10 acres were seeded on fallowed land in 1945, slightly more than 8 acres were seeded in 1953. Fallowed land generally produces more wheat per acre than land not fallowed and the difference in yield is more pronounced in extremely dry years. During the period 1945 to 1951 the average yield per acre of wheat harvested from fallowed land was 16.7 bushels per acre, compared with 10.6 bushels per acre for that harvested from other dry land continuously cropped.

PURPOSE OF BULLETIN

In response to the need for more information relating to Montana Wheat, the Montana Crop and Livestock Reporting Service has assembled the data appearing on the following pages. Practices and situations affecting the production and marketing of this crop are presented by counties, districts and for the state. Estimates concerning the 1953 wheat were prepared from reports submitted by 3,766 wheat growers in the state. Comparative data for previous years were provided by the same source.

For this project, state funds were matched with Federal funds received from the Agricultural Stabilization and Conservation Service, U.S.D.A., under provisions of the Agricultural Marketing Act of 1946.

COMMERCIAL FERTILIZER APPLIED TO MONTANA WHEAT

Application of commercial fertilizer to wheat growing soils in Montana appears to be in the transitional stage, from experimentation to general practice. The tonnage of nitrogen and phosphate sold within the State in 1953 was much larger than the previous year and continued an upward trend observed for the past ten years. Prior to last year commercial fertilization of wheat was confined largely to small dry land plots and irrigated fields. Most of the fertilizer had been used for sugar beets and potatoes. Consumption of all fertilizers and materials in 1953 amounted to 31,112 tons, 41 percent more than in 1952. The acreage of sugar beets and potatoes increased 13 percent from 1952 to 1953. The following table shows that 213,300 acres of wheat received an application of commercial fertilizer in 1953.

Wheat Acres on Which Commercial Fertilizer Was Applied in 1953

	ALL Y	WHEAT	WINTER	WHEAT	SPRING	WHEAT
COUNTY*	Acres Fertilized	Pct. of Harvested Acres	Acres Fertilized	Pct. of Harvested Acres	Acres Fertilized	Pct. of Harvested Acres
Chouteau	45,500	9.0	26,300	11.2	19,200	7.0
Fergus	31,000	13.1	22,000	16.9	9,000	8.5
Pondera	26,300	12.2	8,700	21.9	17,600	10.6
Teton	19,700	8.5	11,800	9.6	7,900	7.3
Flathead	12,400	33.2	7,100	36.0	5,300	3.0
Gallatin	10,100	10.7	4,300	7.5	5,800	15.8
Prairie	9,300	19.4	5,900	95.1	3,400	8.2
Toole	6,900	2.9		May be not by one on	6,900	3.1
Missoula	6,600	52.8	2,600	35.6	4,000	76.9
Wibaux	5,900	7.8			5,900	7.9
Carbon	4,000	9.0	1,000	4.2	3,000	14.4
Dawson	2,900	1.4			2,900	1.4
Cascade	2,800	1.5	1,300	.8	1,500	4.1
Stillwater	2,700	3.2	2,200	3.0	500	5.4
Sheridan	2,400	.7			2,400	.7
29 Other Counties	24,800	.9	5,000	1.2	19,800	.9
TOTAL	213,300	3.5	98,200	6.9	115,100	2.5
CROPPING PRACTICE						
Irrigated Land	35,200	16.6	6,800	20.4	28,400	15.9
Summer Fallow Land	154,900	3.1	86,900	6.7	68,000	1.9
Other Dry Land	23,200	2.6	4,500	6.1	18,700	2.3

^{*}Acres fertilized computed separately for 15 principal counties and as a group for 29 other counties.

MONTANA WHEAT PROTEIN

Montana's wheat is recognized by the grain trade for its good quality and high protein content. Most of the crop is grown on dry land under climatic conditions favorable to the development of protein. High protein wheat is used for blending with wheats of lower protein content and for individual processing to make various types of flour.

Premiums offered for high protein wheat have in most years accounted for a significant amount of the selling price. Quotations at Great Falls for Dark Northern and Northern Spring Wheat containing 16 percent protein for the years 1942-51 placed premiums at nearly 12 cents for each dollar base price. Premiums for the 1953 crop amounted to more than 22 cents for each dollar base price. For mid-August 1953 they were 33 cents per bushel and for mid-June 1954 they were 75 cents per bushel. In relation to base price, protein premiums for the 1953 crop were, with exception of 1938, the highest recorded since 1933. In 1953 Montana produced 27.5 million bushels of wheat containing 15.0 percent or more protein. This compares with 29.6 million bushels in 1952 when premiums were lower and 39.9 million bushels in 1951 when premiums were the lowest since 1935. The unusually high protein premiums paid for the 1953 crop enhanced the cash market for Montana Wheat and resulting in a relatively large movement immediately following harvest.

Montana Wheat Prices

Cash Prices and Protein Premiums at Great Falls*

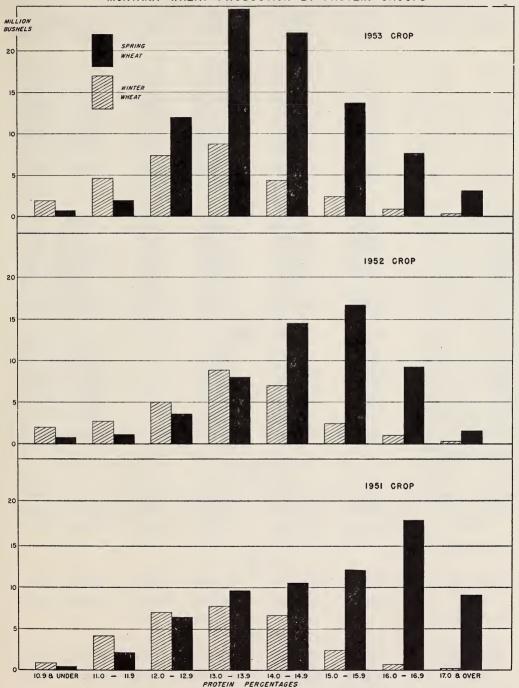
Dark Northern

		Wheat	and Hard Winter Wheat							
Crop Year**	Base Price No. 1	Protein Premium		Percent 16% Protein Premium is of	Base Price No. 1	Protein Premium Premium is of				
and Month	Heavy	15%	16%	17%	Base Price	Heavy	14%	15%	16% B	ase Price
		Cents p	er Busl	nel	Percent		Cents	per Bu	shel	Percent
Av. 1942-51 1952 1953	187.8	13.8 7.6 28.9	19.5 13.2 40.5	25.1 19.1 47.9	11.7 7.0 22.2	164.3 188.8 181.7	8.0 3.7 16.5	12.3 5.5 23.2	17.1 7.0 29.7	7.1 2.9 12.8
1953										
July August September October November December January February March April May June	170.0 180.0 178.0 189.0 184.0 184.0 187.0 181.0 180.0 178.0	6.0 23.0 18.0 35.0 28.0 25.0 26.0 20.0 26.0 37.0 48.0 55.0	10.0 33.0 26.0 41.0 38.0 35.0 32.0 42.0 57.0 59.0 75.0	16.0 43.0 30.0 48.0 42.0 39.0 46.0 40.0 50.0 67.0 69.0 85.0	19.4 14.4 23.0	190.0 170.0 180.0 176.0 187.0 183.0 187.0 188.0 187.0 188.0 179.0	3.0 19.0 15.0 23.0 14.0 10.0 17.0 14.0 10.0 18.0 24.0 31.0	4.0 21.0 17.0 27.0 22.0 18.0 25.0 20.0 18.0 28.0 36.0 43.0	5.0 23.0 19.0 31.0 26.0 22.0 29.0 24.0 36.0 44.0 61.0	2.1 12.4 9.4 15.3 11.8 9.8 13.7 10.7 9.6 15.3 20.1 24.7

^{*}Simple averages of quotations extracted from the Great Falls Tribune for one day each month centering mid-month.

^{**}July of year shown to June following year.

MONTANA WHEAT PRODUCTION BY PROTEIN GROUPS



PRODUCTION OF MONTANA WHEAT BY PROTEIN CONTENT GROUPS AND CROPPING PRACTICES—1951, 1952 and 1953 CROPS

CROPPING PRACTICES

PROTEIN GROUP	Irrigated	Summer Fallow	Other Dry	Volun-	TOTA	
	Land	Land	Land	teer	Bushels	Percent
Percent		Bushels P				
10.9 and under	442.400	1953 CROP		4 200	2 404 700	
11.0 - 11.9	801,400	1,822,000 4,831,100 14,885,400	228,100 1,009,100	4,200 5,200 22,600 56,700 70,100 20,500	2,496,700 6,646,800	2.2 5.8 16.9
13.0 - 13.9	1,473,800	27,009,600 23,216,900 14,459,900 7,323,500 2,567,500	2,855,400 3,373,700 2,238,600 1,168,000 835,500	56,700	6,646,800 19,351,800 31,813,800 26,313,200	27.9 23.0
15.0 - 15.9	338,700 144,700	14,459,900 7,323,500	1,168,000 835,500	20,500 4,800	15,987,100 8,308,500	14.0 7.3
17.0 - 17.9 18.0 and over	75,000	2,567,500 399,800	175,000 32,900	3,700 2,200	2,821,200 434,900	2.5 .4
TOTAL	5,652,000	96,515,700	11,816,300	190,000	114,174,000	100.0
Av. % protein	12.8	13.9	13.4	13.8	13.8	
		WINTER				
10.9 and under	147,500 384,200 251,700 106,700 57,900 55,100 12,100	1,670,500 4,131,100	27,800 172,500 363,600 271,700 131,300 114,900 14,500	4,200 5,200	1,850,000 4,693,000 7,397,300 6,872,500 4,292,500	6.5 16.5
11.0 - 11.9 12.0 - 12.9 13.0 - 13.9	251,700 106,700	6,759,400 6,437,400 4,033,200	363,600 271,700	22,600 56,700 70,100	7,397,300 6,872,500	25.9 24.1
14.0 - 14.9	57,900 55,100	4,033,200 2,206,000	131,300 114,900	20,500	2,390,300	15.1 8.4 2.6
16.0 - 16.9 17.0 - 17.9 18.0 and over		2,206,000 712,500 141,900 85,700	10,500 10,500 10,300	4,800 3,700 2,200	743,900 156,100	2.6 .6 .3
TOTAL		26,177,700	1,117,100	190,000	98,200 28,500,000	.s 100.0
Av. % protein	12.0	13.0	13.5	13.8	12.9	
		SPRING	WHEAT			
10.9 and under	294,900 417,200	151,500 700,000 8,126,000 20,572,200 19,183,700 12,253,900	200,300 836,600		646,700	.8 2.3 13.9
12.0 - 12.9	1,336,700	8,126,000 20,572,200	2,491,800		646,700 1,953,800 11,954,500 24,941,300 22,020,700	13.9
14.0 - 14.9	729,700 283,600	19,183,700 12,253,900	3,002,000 2,107,300 1,053,100		13.590.600	29.1 25.7 15.9
16.0 - 16.9	132,600 75,000	6,611,000 2,425,600 314,100	821,000 164,500		7,564,600 2,665,100 336,700	15.9 8.8 3.1
18.0 and over			22,600			.4
TOTAL Av. % Protein		70,338,000 14.2	10,699,200 13.5		85,674,000 14.1	100.0
11v. /8 liotem		ALL W			1701	
		1953	Crop			
14.9 and less	5,093,600 558,400	71,765,000 24,750,700	9,604,900 2,211,400	158,800 31,200	86,622,300 27,551,700	75.8 24.2
TOTAL		96,515,700	11,816,300	190,000	114,174,000	100.0
Av. % protein	12.8	13.9	13.4	13.8	13.8	
		1952	Crop			
14.9 and less 15.0 and over	6,279,500 268,700	43,372,000 26,011,200	4,141,700 3,258,900	183,100 32,900	53,976,300 29,571,700	64.6 35.4
TOTAL		69,383,200	7,400,600	216,000	83,548,000	
Av. % protein	12.6	14.2	14.5	13.5	14.1	
		1951	Crop			
14.9 and less 15.0 and over	6,997,300 427,800	43,911,500 34,898,000	4,214,300 4,541,500	38,600 4,000	55,161,700 39,871,300	58.0 42.0
TOTAL		78,809,500	8,755,800	42,600	95,033,000	100.0
Av. % protein	12.6	14.4	14.8	13.0	14.3	

MONTANA WHEAT PRODUCTION BY PROTEIN CONTENT GROUPS 1951, 1952 AND 1953 CROPS

	19	51	19	52	1953		
COUNTY*	14.9 Percent	15.0 Percent	14.9 Percent	15.0 Percent	14.9 Percent	15.0 Percent	
	and Less	and More	and Less	and More	and Less	and More	
	Protein	Protein	Protein	Protein	Protein	Protein	
Hill	575,700	4,356,700	3,660,200	3,042,100	4,024,400	5,334,700	
Roosevelt		4,178,100	494,300	2,936,100	7,747,300	436,500	
Sheridan		3,467,900	1,499,700	2,069,300	6,362,600	196,800	
Daniels	889,400	2,900,500 2,879,400 2,722,100	2,074,300 1,914,100 36,500	1,126,700 1,882,800 1,451,500	6,394,100 3,776,300 3,750,900	197,800 3,204,000 806,700	
Chouteau	188,100	2,196,900	5,935,300	1,490,300	6,023,000	3,587,000	
Liberty		2,117,500	1,080,900	2,077,800	2,240,900	1,979,300	
Dawson		1,778,800	145,200	926,000	3,099,100	404,400	
Richland	1,717,300	1,666,500	519,100	1,245,600	3,347,600	139,500	
Toole		1,226,400	2,832,600	1,238,500	4,235,800	806,800	
Blaine		1,110,700	752,400	1,543,600	847,700	1,698,000	
Fergus Phillips Fallon	196,700	1,109,800 1,055,200 1,040,000	2,521,400 763,100 25,900	1,005,600 1,207,300 643,100	3,881,600 908,300 658,600	552,400 1,755,300 748,600	
Wibaux	1,140,100	877,000 615,200 590,300	41,500 1,240,000 2,937,900	399,000 536,600 554,100	706,900 1,474,900 3,450,100	265,400 248,100 220,200	
Garfield	2,248,200	506,300	21,000	217,100	188,100	640,600	
Yellowstone		444,600	2,340,500	190,500	1,771,300	404,800	
Prairie		435,400	44,100	135,100	367,100	216,500	
Powder River	1,356,700	313,000	225,500	107,900	107,300	321,800	
Glacier		286,700	1,149,000	283,000	1,530,700	124,100	
Pondera		203,700	3,222,900	1,196,100	4,368,600	426,800	
Rosebud	228,500	176,500	178,300	177,700	171,800	192,200	
Golden Valley		148,800	419,900	43,400	246,600	127,600	
Musselshell		148,100	143,400	141,500	167,200	152,600	
Big Horn	113,300	147,500	1,749,000	162,900	493,500	593,000	
Wheatland		96,500	213,900	27,800	122,700	91,100	
Flathead		74,200	963,700	57,900	925,600	13,100	
Madison	1,042,200	58,200	390,100	· 13,900	241,000	65,600	
Carbon		51,800	1,160,300	13,400	768,400	52,500	
Gallatin		46,000	2,499,100	10,600	2,070,300	113,600	
Stillwater	6,616,900	32,700	1,585,000	53,000	907,400	427,000	
Teton		15,200	3,928,800	877,000	4,607,200	242,500	
Lewis and Clark		12,900	431,700	10,900	322,400	10,000	
Park	682,400	6,200	871,500		500,800	53,200	
Other Counties	3,790,900	777,500	3,964,200	476,000	3,814,200	701,600	
STATE	55,162,200	39,870,800	53,976,300	29,571,700	86,622,300	27,551,700	

^{*}County arrangement based on 1951 Production of 15.0 percent and more protein.

MONTANA PRODUCTION OF ALL WHEAT AND AVERAGE PERCENT PROTEIN—1951, 1952 and 1953 CROPS

	19	51	19	752	1953		
COUNTY*	Bushels Produced	Average Percent Protein	Bushels Produced	Average Percent Protein	Bushels Produced	Average Percent Protein	
Garfield	1,251,900	16.8	238,100	15.8	828,700	15.7	
Phillips		16.6	1,970,400	15.0	2,663,600	15.3	
McCone		16.4	1,488,000	16.2	4,557,600	14.1	
Wibaux	1,414,600	16.0	440,500	16.3	972,300	15.0	
Blaine		16.0	2,296,000	14.8	2,545,700	14.9	
Liberty		15.9	3,158,700	15.1	4,220,200	14.8	
Roosevelt	5,093,800	15.9	3,430,400	15.6	8,183,800	13.3	
Hill		15.8	6,702,300	14.6	9,359,100	14.9	
Fallon		15.8	669,000	16.1	1,407,200	14.9	
Sheridan	2,370,500	15.8	3,569,000	14.8	6,559,400	13.1	
Dawson		15.7	1,071,200	15.7	3,503,500	13.7	
Daniels		15.6	3,201,000	14.2	6,591,900	12.8	
Valley	363,200	15.5	3,796,900	14.6	6,980,300	14.6	
Musselshell		15.4	284,900	15.1	319,800	14.8	
Richland		15.2	1,764,700	15.0	3,487,100	12.9	
Prairie	482,600	15.2	179,200	15.3	583,600	13.9	
Powder River		15.0	333,400	15.0	429,100	16.3	
Toole		14.4	4,071,100	14.4	5,042,600	13.9	
Judith Basin	377,300	14.3	1,776,600	13.9	1,723,000	13.3	
Golden Valley		14.1	463,300	12.9	374,200	14.1	
Fergus		14.1	3,527,000	13.8	4,434,000	12.9	
Wheatland	11,686,200	14.0	241,700	13.1	213,800	14.5	
Chouteau		13.9	7,425,600	14.0	9,610,000	14.1	
Ros e bud		13.4	356,000	14.6	364,000	14.9	
Pondera	2,692,800	13.2	4,419,000	14.0	4,795,400	13.4	
Yellowstone		12.9	2,531,000	12.9	2,176,100	13.6	
Teton		12.7	4,805,800	13.3	4,849,700	12.5	
Clacier	1,643,400	12.7	1,432,000	13.9	1,654,800	13.3	
Big Horn	2,284,400	12.7	1,911,900	13.8	1,086,500	14.8	
Cascade	4,765,000	12.7	3,492,000	13.4	3,670,300	12.4	
Flathead	1,094,000	12.5	1,021,600	12.2	938,700	11.8	
Carbon		12.7	1,173,700	11.9	820,900	12.9	
Lewis and Clark		12.4	442,600	12.3	332,400	12.7	
Park		12.3	871,500	12.1	554,000	13.5	
Stillwater		12.2	1,638,000	12.6	1,334,400	14.1	
Madison		12.1	404,000	11.6	306,600	14.0	
Gallatin	2,107,500	11.8	2,509,700	11.1	2,183,900	12.0	
Other Counties	4,568,400	12.7	4,440,200	12.1	4,515,800	12.1	
STATE	95,033,000	14.4	83,548,000	14.1	114,174,000	13.8	

^{*}County arrangement based on percent protein for the 1951 crop.

CHEMICAL CONTROL OF WEEDS IN MONTANA WHEAT

Application of chemicals to wheat fields for control of weeds is a common practice in Montana. In 1952 more than half of the acreage seeded to wheat in the State was sprayed for weeds. Chemicals were applied to 3,183,000 acres of wheat, of which 1,211,000 acres was winter wheat and 1,972,000 acres spring wheat. The acreage sprayed in 1951 was slightly larger than in 1952, which may indicate that weed spraying has reached a peak. After several years of experimentation, the use of chemicals as a weed killer received general acceptance in 1944. Although data on acreage sprayed for weeds were not assembled until 1949, it was evident by 1947 that a large proportion of the winter wheat acreage received weed killing sprays. In successive years this practice broadened to include much of the spring wheat, barley and other grains.

To obtain maximum destruction of weeds, the chemicals should be applied when the plants are at a certain stage of development. This has required close timing and the use of equipment which can spray large areas in a short time. Slow speed, maneuverable airplanes have been widely used for fields of large size and suitable contour. However, ground spraying rigs are common in all weed spraying localities.

Most of the wheat acreage sprayed for weeds in Montana is situated in the central and north central portions. Chouteau County, the most prominent wheat producing county, heads the list with 390,000 acres sprayed in 1952. The neighboring counties of Hill and Liberty with 333,000 acres and 211,000 acres sprayed respectively are next in rank. More than 100,000 acres were sprayed in each of the prominent spring wheat counties of Roosevelt, Sheridan and Valley.

Wheat Acreage Sprayed for Weeds 1949 - 1952

					Acre	age S	prayed By	Crop	ping Prac	ctice	
	Tot	αl						C	ther		***************************************
YEAR-Kind	Seeded	S	prayed	Irri	gated	Summ	ner Fallow	Dry	Land	Vol	unteer
	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres
1949—											
All Wheat Winter Wheat Spring Wheat	1,710,000	47 68 39	2,801,600 1,160,100 1,641,500	35 41 34	83,000 18,600 64,400	52 69 44	2,311,000 1,067,900 1,243,100	30 53 28	399,200 65,200 334,000	65 65	8,400 8,400
1950-											
All Wheat Winter Wheat Spring Wheat		51 64 46	2,679,800 901,600 1,778,200	37 28 38	74,900 8,400 66,500	55 65 51	2,372,300 825,300 1,547,000	30 59 25	225,000 60,300 164,700	35 35	7,600 7,600
1951											
All Wheat Winter Wheat Spring Wheat	1,500,000	53 64 50	3,348,600 953,800 2,394,800	35 33 35	82,000 10.900 71,100	59 65 57	2,983,300 911,500 2,071,800	29 46 28	282,400 30,500 251,900	21 21	900 900
1952											
All Wheat Winter Wheat Spring Wheat	1,695,000	51 71 43	3,183,100 1,211,100 1,972,000	33 44 30	75,400 19,100 56,300	57 73 50	2,817,900 1,138,700 1,679,200	26 41 24	277,400 40,900 236,500	55 55	12,400 12,400

WHEAT SPRAYED FOR WEEDS 1952 CROP

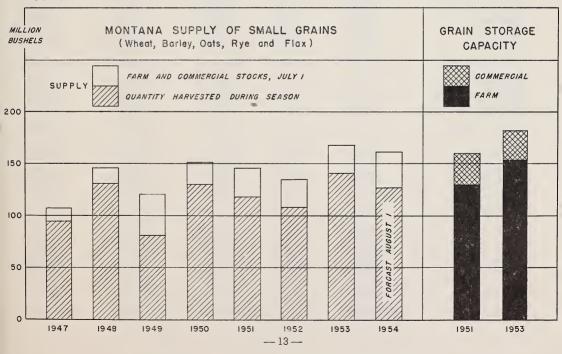
	All Wheat			Win	ter Wh	ıeαt	Spring Wheat		
COUNTY &	Seeded	-	prayed	Seeded		rayed	Seeded	Sr	prayed
DISTRICT Deerlodge	Acres 2,200	Pct.	Acres 0	Acres 100	Pct.	Acres 0	2 100	Pct.	Acres
Flathead Granite	42,200	55 10	23,400 300	26,900	63 50	17,000	2,100 15,300 2,800	42 7	6,400
Lake	32,100	45 0	14,400	200 21,100 300	50 0	10,500	11,000	35 0	3,900
Lincoln Mineral Missoula	12,800	7 30	100 3, <u>8</u> 00	. 300 5,600	33 54	100 3,000	1,100 7,200	0 11	800
Powell	12,000	20 33	4,000	400 3,900	50 13	200 500	7,900 8,100	19 43	1,500 3,500
Sanders West of Divide		39 41	3,600 51,300	6,300 65,100	51 53	3,200 34,600	2,900 59,400	14 28	400 16,700
Blaine	120,900	80	96,600		66		114,100	81	92,100
Chouteau Glacier	519,200	75 62	390,000	6,800 383,200 7,300 128,900	84 89	4,500 322,300 6,500	136,000 69,000	50 59	67,700 40,600
Hill Liberty	488,500	68 86	47,100 333,100 211,200 54,300	54,/00	77 93	6,500 98,900 50,600	359,600 189,700	65 85	234,200
Phillips Pondera	131,400 218,300	41 75	162,800	2,400 26,600	58 74	1,400 19,800	129,000 191,700	41 75	52,900 143,000
Teton Toole	243,200	72 74	174,200 169,000	70,800 10,900	82 67	57,800 7,300	172,400 217,800	68 74	116,400 161,700
N. Central District	2,270,900		1,638,300	691,600	82	569,100	1,579,300	68	1,069,200
Daniels Dawson	211,900	24 17	72,800 36,800	0 1,800	0 11	0 200	306,300 210,100	24 17	72,800 36,600
Garfield McCone Richland	67 300	33 25 15	21,900 64,200	3,100 7,700	42 36	1,300 2,800	64,200 250,900	32 24	20,600
Roosevelt	379,800	33	34,800 126,300	1,500 400	7 25	100 100	225,200 379,400	15 33	34,700 126,200
Sheridan Valley	316,500	47 37	149,500 123,700	300 1,400	0 29	400	316,200 330,600	47 37	149,500 123,300
N. East District	2,099,100	30	630,000	16,200	30	4,900	2,082,900	30	625,100
Broadwater Cascade Fergus	43,600 204,500	63 71 71	27,500 145,900	27,600 136,100	63 78	17,300 105,800	16,000 68,400	64 59	10,200 40,100
Fergus Golden Valley Judith Basin	247,600 26,600	65	175,200 17,400	135,700 21,600	86 70	117,100	111,900 5,000 69,200	59 52 44	58,100
Lewis and Clark	23,000-	62 52	78,900 12,200	58,100 13,000	74 88	11,500	10,600	52 66	2,200 35,800 700
Meagher Musselshell	29,800	60 68	78,900 12,200 2,500 20,300	1,300 22,100	77 67	14,900	2,900 7,700	52 70	1,500 5,400
Petroleum Wheatland	11,000 14,500	38 39	4,200 5,600	4,400 6,400	11 62	500 4,000	6,600 8,100	56 20	3,700 1,600
Central District		67	489,700	426,300	78	330,400	306,400	52	159,300
Beaverhead	98,500	0 28	27,800	7,800 65,400	0 37	24,000	6,100 33,100	0 11	0 3, <u>8</u> 00
Jefferson Madison	15,100 18,500 200	28 23 34	3,400 6,300	7,700 9,600	38 41	2,900 3,900	7,400 8,900 100	7 27	500 2,400
S. West District		0 26	0 37,500	100 90,600	0 34	30,800	55,600	0 12	6, 700
Big Horn	104,900	58	60,900	78,200 29,900	67	52,300 18,700	26,700	32	8,600
CarbonPark	36,700	53 38	27,700 14,000	28,300	63 37	10,600	22,500 8,400	40 40	9,000 3,400
Stillwater Sweet Grass	20,000	71 39	67,000 7,800	81,900 8,000	73 50	59,700 4,000	12,300 12,000	59 32	7,300 3,800
TreasureYellowstone	10,500 127 , 500	67 62	700 79,000	5,100 107,600	6 66	300 70,600	5,400 19,900	7 42	400 8,400
S. Central District	446,200	58	257,100	339,000	64	216,200	107,200	38	40,900
Carter	45,900 32,200	8 18	3,800 5,900	5,700 9,600	0 28	2,700	40,200 22,600	9 14	3,800 3,200
Fallon Powder River	32,200 127,700 45,200	14 29 17	5,900 17,900 12,900	2,800 28,300	68 34	1,900 9,500	124,900	13 20	16,000 3,400
PrairieRosebud	45,200 46,200 36,400	41	14,900	4,400 15,100	48 59	2,100 8,900	41,800 21,300	13 28	5,600 6,000
Wibaux	76,800	21	16,100	300	0	0	76,500	21	16,100
S. East District		19	79,200 3,183,100	66,200	38 71 1	25,100 ,211,100	344,200 4,535,000	16	54,100
DIAIL	0,230,000	31 3	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,075,000	, , ,	,,	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	73 1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

FARM AND COMMERCIAL GRAIN STORAGE FACILITIES IN MONTANA

Farmers and commercial warehousemen in Montana have increased their grain storage capacity to handle larger crops and more carryover. Total storage facilities available in the State at the end of the year 1953 amounted to 182 million bushels. About 152½ million bushels of this was on-the-farm storage and the balance of 29½ million bushels was commercial storage. Two years previous, total facilities would accommodate 158 million bushels of grain. During the interim, farm bin space increased 22 million and commercial space 2 million bushels.

Most of Montana's small grains are harvested within a six weeks' period during August and early September. Coinciding with that in North Dakota, the harvest in Montana is the last in the nation and much of the grain must be stored locally as little space is available at the large grain terminals. Storage facilities in the nation have become more congested in recent years and many growers have found it desirable to enlarge their storage capacity. During the three-year period 1949-51 approximately 28½ million bushels of farm storage was constructed in the state. Another 22½ million bushels capacity was built during the two years, 1952 and 1953. Wooden granaries make up 79 percent of the farm storage space but steel bins and quonset type structures are gaining prominence as they comprise more than three-fourths of the new storage construction in 1952 and 1953.

Althought total grain storage space exceeded small grain production in 1953 by approximately 41 million bushels, some growers found it necessary to pile grain on the ground at harvest time. Part of the farm and commercial space was occupied by large stocks carried over from previous years and the bins partially filled with one kind of grain could not be utilized for other grains. While many growers with long hauls to country elevators have adequate space, others, especially those within close proximity of shipping points have little if any storage capacity. Such conditions increase the burden of placing Montana grains under cover in years of large harvest and carryover.



GRAIN STORAGE CAPACITY AND GRAIN PRODUCTION 1951 AND 1953

		1951 AND	1953		
	1953 On Farms	Grain Storage	Capacity	1953 Small Grain Production	1951 Grain Storage Capacity Total
COUNTY & DISTRICT	and Ranches	Commercial Mills and Elevators	Total	Wheat, Oats, Barley, Rye and Flax	Farm and Commercial
			Bushels		_
Deerlodge Flathead Granite Lake Lincoln Mineral Missoula Powell Ravalli Sanders	60,000 1,680,000 90,000 1,360,000 60,000 570,000 330,000 640,000 430,000	618,000 20,000 223,000 215,000 25,000 41,000	60,000 2,298,000 110,000 1,583,000 60,000 50,000 355,000 681,000 477,000	151,700 1,565,300 103,900 1,558,900 85,100 45,000 496,000 309,200 963,700 340,200	50,000 2,090,000 110,000 1,515,000 60,000 50,000 685,000 325,000 639,000 464,000
W. of Divide	5,270,000	1,089,000	6,359,000	5,619,000	5,988,000
Blaine Chouteau Glacier Hill Liberty Phillips Pondera Teton Toole	3,990,000 9,990,000 4,250,000 3,180,000 7,510,000	806,000 1,882,000 503,000 1,220,000 623,000 492,000 1,337,000 1,380,000 1,171,000	3,856,000 13,232,000 4,493,000 11,210,000 4,873,000 3,672,000 8,847,000 8,130,000 6,641,000	3,201,900 10,403,600 4,627,900 9,909,700 4,376,500 3,122,900 6,486,200 5,922,100 6,026,200	3,461,000 12,160,000 3,438,000 9,608,000 3,944,000 3,543,000 7,247,000 7,261,000 4,370,000
N. Central District	55,540,000	9,414,000	64,954,000	54,077,000	55,032,000
Daniels Dawson Garfield McCone Richland Roosevelt Sheridan Valley	4,680,000 1,270,000 5,700,000 4,990,000 8,900,000 8,570,000	650,000 644,000 282,000 435,000 1,197,000 1,162,000 1,158,000	7,540,000 5,324,000 1,270,000 5,982,000 5,425,000 10,097,000 9,732,000 8,878,000	7,379,800 4,305,600 1,026,900 5,160,200 4,592,400 8,857,200 7,261,500 7,774,300	6,272,000 4,076,000 980,000 4,355,000 4,796,000 7,896,000 8,595,000 7,628,000
N. East District	48,720,000	5,528,000	54,248,000	46,357,900	44,598,000
Broadwater Cascade Fergus Golden Valley Judith Basin Lewis and Clark Meagher Musselshell Petroleum Wheatland	4,700,000 5,750,000 640,000 2,730,000 930,000 160,000 640,000 180,000	307,000 3,976,000 2,439,000 108,000 865,000 20,000 90,000 25,000 600,000	1,247,000 8,676,000 8,189,000 748,000 3,595,000 950,000 180,000 730,000 205,000 1,080,000	1,156,200 4,113,400 5,380,500 482,200 2,166,200 592,500 166,200 390,500 135,300 335,900	1,162,000 8,332,000 7,439,000 530,000 3,241,000 660,000 170,000 735,000 185,000
Central District	17,150,000	8,450,000	25,600,000	14,918,900	23,529,000
Beaverhead	3,450,000 570,000 840,000	60,000 1,873,000 24,000 65,000	960,000 5,323,000 594,000 905,000 30,000	507,700 3,252,800 424,700 725,500 15,500	878,000 5,018,000 538,000 896,000 30,000
S. West District	5,790,000	2,022,000	7,812,000	4,926,200	7,360,000
Big Horn Carbon Park Stillwater Sweet Grass Treasure Yellowstone	1,890,000 890,000 2,180,000 420,000 330,000	202,000 357,000 341,000 358,000 65,000 20,000 608,000	2,922,000 2,247,000 1,231,000 2,538,000 485,000 350,000 4,358,000	1,450,300 1,444,900 952,700 1,596,600 487,800 277,400 2,851,700	2,608,000 1,985,000 1,174,000 2,144,000 395,000 330,000 4,375,000
S. Central District	12,180,000	1,951,000	14,131,000	9,061,400	13,011,000
Carter Custer Fallon Powder River Prairie Rosebud Wibaux	880,000 1,950,000 1,060,000 890,000 1,060,000	305,000 397,000 40,000 155,000 99,000 210,000	580,000 1,185,000 2,347,000 1,100,000 1,045,000 1,159,000 1,740,000	554,600 659,800 1,823,400 577,800 733,700 561,000 1,276,300	560,000 1,000,000 2,225,000 1,040,000 1,000,000 1,040,000 1,715,000
S. East District	7,950,000	1,206,000	9,156,000	6,186,600	8,580,000
STATE	152,600,000	29,660,000	182,260,000	141,147,000	158,098,000



